# Description of the male of Steatoda ephippiata (Araneae: Theridiidae)

#### **Johan Van Keer & Robert Bosmans**

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**Abstract**: The previously unknown male of *Steatoda ephippiata* (Thorell, 1875) is described from recently collected material in Tunisia. Some new distribution records for the species are added and all known records are mapped.

Key words: Israel, North Africa, taxonomy, Tunisia

The members of the genus *Steatoda* are medium-sized to large spiders, represented in West and Central Europe by five well-known species (PLATNICK 2010). In the Mediterranean region, several less known species occur, some of which both sexes are known, some with only one sex known and even some undescribed species are to be expected. LEVY & AMITAI (1982) revised the Steatoda species of the Eastern Mediterranean region, including the Steatoda ephippiata (Thorell, 1875) of which at that time, only the female was known. The females were described from three occasions, originally from Egypt as Lithyphantes ephippiatus by THORELL (1875), then as Lithyphantes ochraceus by SIMON (1908), from Libya and later as Teutana argentea by CAPORIACCO (1933) also from Libya (LEVY & AMITAI 1982). The male was unknown until now and is described here for the first time.

CJVK: collection J. Van Keer, CRB: collection R. Bosmans. All measurements are in mm.

### Taxonomy of Steatoda ephippiata (Thorell, 1875)

*Lithyphantes ephippiatus* Thorell, 1875: 63 (descr. female from Egypt).

Lithyphantes ochraceus Simon, 1908: 428 (descr. female from Libya).

*Teutana argentea* Caporiacco, 1933: 322, fig. 5 (descr. female from Libya); DENIS 1966: 121, fig. 31 (descr. female).

Steatoda ephippiata (Thorell, 1875): LEVY & AMITAI 1982: 22, figs 42-44 (descr. female; synonymy of *Lithyphantes ochraceus* and *Teutana argentea*); LEVY 1998: 71, figs 131-133 (descr. female).

Johan VAN KEER, Bormstraat 204 bus 3, B-1880 Kapelle-op-den-Bos, Belgium; E-Mail: johan.van.keer1@telenet.be

Robert BOSMANS, Terrestrial Ecological Unit, Department of Biology, Ghent University, Ledeganckstraat 35, B-9000 Gent, Belgium; E-Mail: robert.bosmans@lne.vlaanderen.be

# Diagnosis

Males are separated from all other *Steatoda* species by the large straight bifid theridiid tegular apophysis and the short straight embolus (figs 2-3). Females are distinguished by a transverse structure of the epigyne with lateral arched rims and an upward protruding median bulge. Males and females can also be separated from all other *Steatoda* species by the pattern of black spots on the white dorsal side of the opisthosoma (fig. 1).

### Material examined (see also fig. 4)

TUNISIA. G. Gafsa: Gafsa oasis, 34°24'42"N, 8°46'45"E, 284 m a.s.l., 1 male, stones and litter in oasis, 2.III.2005, J. Van Keer leg. (CJVK).

G. Kebili: Douz South, Djebil National Park, 33°27'41"N, 9°01'46"E, 69 m a.s.l., 1 female, under stones, 30.III.2000, R. Bosmans leg. (CRB); same locality, 1 female, under stones, 2.IV.2001, U. Molzdryk leg. (CRB).

Previous records (see also fig. 4)

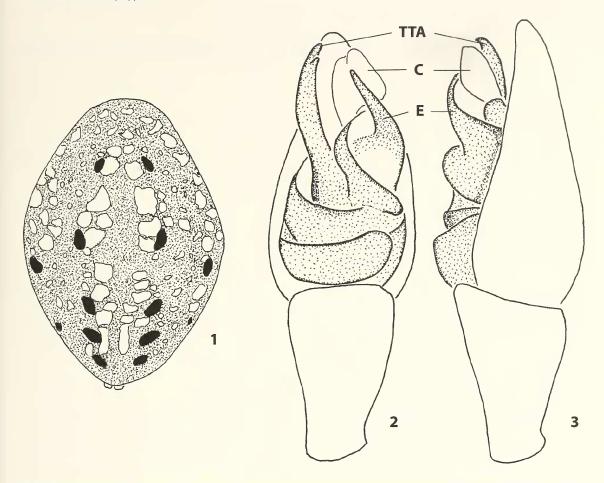
ALGERIA. Wil. Aïn Sefra: Aïn Sefra (LEVY & AMITAI 1982). Wil. El Bayad: El Abiod (DENIS, 1966, sub *T. argentea*). EGYPT. Without precise locality (THORELL 1875, sub *L. epphippiatus*; SIMON 1908, sub *S. ochraceus*). Sinai: Bir Gifgafa, Ayun Mussa (LEVY & AMITAI 1982). ISRAEL. Ze'elim, Makhtesh Ramon (LEVY & AMITAI 1982). LIBYA. Ajdabiya: Between Ajdabiya and Jalu (CAPORIACCO 1933, sub *T. argentea*). Al Kufrah: Kufrah oasis (Cufra; CAPORIACCO 1933, sub *T. argentea*). Murzuq: El Gatroun (DENIS 1966, sub *T. argentea*). Tripoli: Tripoli (SIMON 1908, sub *S. ochraceus*). TUNISIA. Without precise locality (SIMON 1908, sub *S. ochraceus*).

## Description

Male:

Measurements: Total length 4.2; carapace 1.9 long, 1.4 wide; Femur I 2.51 long.

Colour: Prosoma and sternum uniformly yellowish brown, especially at sides covered with small, pointed



**Figs. 1-3**. *Steatoda epphiata* 1. Abomen, dorsal view; 2. Male palp, ventral view; 3. Idem, lateral view. C: Conductor; E: Embolus; TTA: Theridiid tegular apophysis

tubercles bearing bristles; central fovea rather deep; legs yellowish brown, without spots or annulations; opisthosoma (fig. 1) dorsally cream white mixed with pale grey, with 5 pairs of black spots in longitudinal rows, laterally greyish brown, ventrally with broad white band covering almost entire region between epigastric furrow and spinnerets.

Chelicerae: Not enlarged, armed with one promarginal tooth.

Palp (figs. 2-3): Tibia 0.27 long, cymbium 0.45 long; theridiid tegular apophysis



Fig. 4: Map with all known records of *Steatoda ephippiata*. ● = new localities, ▲ = localities from literature. 1. Ain-Sefra (Algeria), 2. El Abiod (Algeria), 3. Gafsa (Tunisia), 4. Douz-Kebili (Tunisia), 5. Tripoli (Libya), 6. Ajdabiya (Libya), 7. Kufra (Libya), 8. El Gatroun (Libya), 9. Ze'elím (Israel), 10. Makatesh Ramon (Israel), 11. Sinai (Egypt), 12. Egypt (no specific locality)

large and straight, bifid distally and almost reaching tip of cymbium; embolus short and straight; conductor membraneous, as wide as long with bluntly rounded tip reaching almost as high as the theridiid tegular apophysis.

Female: See LEVY & AMITAI (1982).

### Distribution

The species is known from Algeria, Tunisia, Libya, Egypt and Israel (fig. 4).

### **Ecology**

The few specimens collected were found in arid and semi-arid zones under stones. The single male was captured in March, females in March and April and in Israel also in September (LEVY & AMITAI 1982).

### Acknowledgements

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#### References

- CAPORIACCO L. di (1933): Araneidi. In: Spedizioni scientifica all'oasi di Cufra (Marzo-Luglio 1931). Annali del Museo Civico di Storia Naturale di Genova 56: 311-340
- DENIS J. (1966): Les araignées du Fezzan. Bulletin de la Société d'Histoire naturelle de l'Afrique du Nord 55: 103-140
- LEVY G. & P. AMITAI. (1982): The cobweb spider genus *Steatoda* (Araneae, Theridiidae) of Israel and Sinai. Zoologica Scripta 11: 13-30 doi: 10.1111/j.1463-6409.1982.tb00515.x
- PLATNICK N.I. (2010): The world spider catalog, version 11.0. American Museum of Natural History. Internet: http://research.amnh.org/iz/spiders/catalog/index. html\_
- SIMON E. (1908): Etude sur les arachnides recueillis par le Dr. Klaptocz en Tripolitaine. – Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere 26: 419-438
- THORELL T. (1875): Descriptions of several European and North African spiders. – Kungliga Svenska Vetenskapsakademiens Handlingar (N.F.) 13(5): 3-203